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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,064

07/28/2003

Gregory S. Herman

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INTELLECTUAL PROPERTY ADMINISTRATION
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EXAMINER

RUTHKOSKY, MARK

ART UNIT

PAPER NUMBER

1745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/629,064	Applicant(s) HERMAN ET AL.	
	Examiner Mark Ruthkosky	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 20-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-19 and 59-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/28/03; 6/12/05; 12/9/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed 7/28/2003, 8/12/2005, and 12/9/2005 have been placed in the application file, and the information referred to therein has been considered as to the merits.

Drawings

The drawings filed on 7/28/2003 have been approved.

Election/Restrictions

Applicant's election with traverse of the election of species in the reply filed on 11/14/2006 is acknowledged. The traversal is on the ground(s) that any or all of these distinguishing features of the species may be included in a single embodiment and that the species are not mutually exclusive. This is not found persuasive because although the different limitation of the claimed species could be incorporated into a single embodiment of the invention, this is not what is claimed. In applicant's amended claims and newly added claims in the paper of 8/4/2006, the very broad generic claim to a frame and ejection device are limited by dependent claims that require very different components making mutually exclusive inventions. Claims 15-19 and 59-61 are elected.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-19 and 59-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Horvath et al. (US 2003/0007034.)

The instant claims are to a dopant solution application apparatus, comprising a frame, and a plurality of fluid ejection devices disposed on said frame wherein said fluid ejection devices are configured to variably eject a dopant solution onto a substrate. The phrase “configured to” does not provide a structural limitation to the invention, a product having specific elements. By claiming what function these elements perform, the claims are given process features. MPEP 2113 states, “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”

Horvath et al. (US 2003/0007034) teaches a dopant solution application apparatus, comprising a frame, and a plurality of fluid ejection devices disposed on said frame. Inks are noted throughout the reference. The fluid ejection devices are configured to variably eject a dopant solution onto a substrate as the inkjet is taught to print characters, symbols or images (for example, paragraphs 27-31 and 83-88.) The print medium is noted to be cardstock, mylar, transparencies, sheet material and the like (p. 27.) The dopant solution application apparatus comprising a substrate advancement mechanism (or a media transport assembly) coupled to the frame and configured to advance a substrate in an advancement direction. The dopant solution application apparatus comprises fluid ejection devices with an array configured to variably eject said at least one dopant solution (see figures 1-5 and at least, the corresponding text.) The fluid ejection devices comprise drop-on-demand fluid ejection devices arranged in an array that spans a width of said substrate (p 29-33.) The printhead substrate has a first axis with a plurality of fluid ejection devices. The fluid ejection devices are configured to vary a concentration of said dopant along said first axis and in a direction at an angle to said first axis of said substrate in order to print characters, symbols or images (p. 31.) The plurality of fluid ejection devices are further configured to apply a second dopant to said substrate, wherein a concentration of said second dopant varies along a second axis of said substrate (see p. 56.) Thus, the claims are anticipated.

Examiner Correspondence


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The

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examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky
Primary Patent Examiner
Art Unit 1745


2.5.07